

Ultimo 12

Morel's high-end subwoofer Nir Paz introduces Morel's entry into serious SQ/SPL



Nir Paz from Morel flanked by M. Chandra from Roma Motor Singapore and Kwet Min from Roma Motor Indonesia

It's been said, real SPL competitors apply more science than SQ competitors. To achieve the enormous sound pressure levels requires a very thorough understanding of driver, enclosure, amplifier power, structural integrity of the vehicle and most important, how the various elements interact with each other for the final dB count. Specific SPL subwoofers were designed for the rigours of that 4-second burp, where regular subwoofers would have the voice coil fried in half that time!

Morel's range of speakers has been focused on the component systems, the Supremo and Elate represent some of the premium models that have won Morel scores of enthusiasts. However Nir's visit to Singapore is to introduce the new Ultimo 12 subwoofer, the first of its kind that Morel felt confident in both its SQ and SPL capabilities. We spoke to Nir on his first visit to Singapore.

Nir: The Ultimo is unlike anything we have ever done before, the voice coil is one of the biggest ever - 5.1 inches! With a big voice coil, we can handle massive amount of power, have a strong support structure for the cone. The cone is also special - it uses a pulp paper base with a carbon fibre overlay. This combines

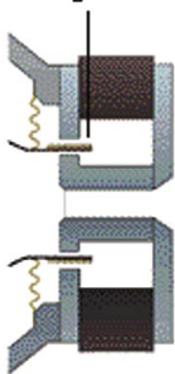
the musicality of paper with the speed and transient response of carbon fibre. The underhung voice coil coupled with a high excursion means a big magnet. The double ferrite magnet is a special design that has a very high efficiency up to 90% compared to ordinary ferrite magnets. The voice coil is wound externally, this helps in the cooling under extreme conditions.

As we design and built the entire drive unit, we can control many of the design parameters. Using our Progressive Field Symmetry or PFS, the surround and spider were designed to work as one - when more power is applied to the speaker, the surround and spider are designed to maintain symmetric and linear movement of the entire one assembly, for example it will stiffen to maintain control, preventing excessive displacement of the voice coil and woofer bottoming. This helps to increase the power handling of the subwoofer - it has a RMS rating of 1000 watts and a maximum rating of 3000 watts peak at its 4-ohm load. (Ed - Try to find an amplifier with 1000 watts @ 4 ohms...)

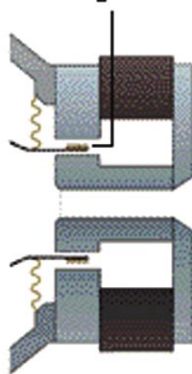
The design of the subwoofer also facilitates field repairs e.g. for SPL competition where burnt voice coil can affect any make of SPL subwoofers. The new Accucenter design enables the magnet assembly to be removed in minutes and the entire cone and chassis replaced.

The Ultimo 12 is not just a great subwoofer for SPL application; it is very much first and foremost designed for great sound quality. We offer the Ultimo to the more discerning customers who take bass performance seriously!

overhung voice coil



underhung voice coil



Morel Ultimo 12 sub